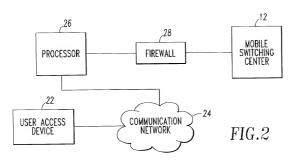
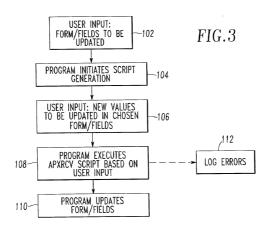


FIG.1





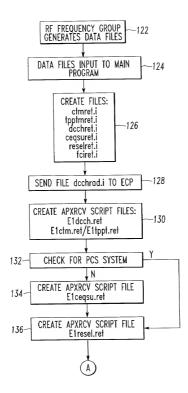
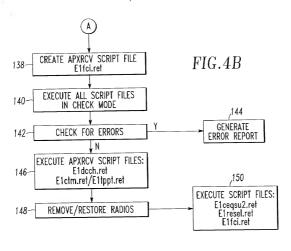


FIG.4A



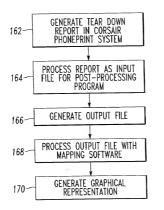
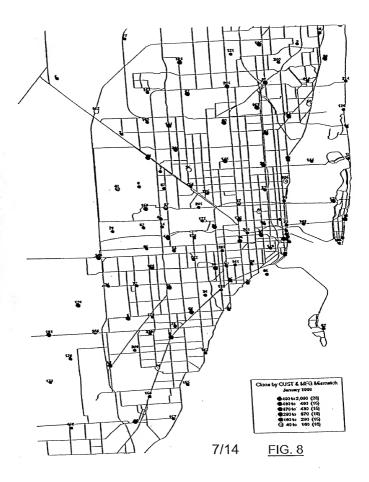
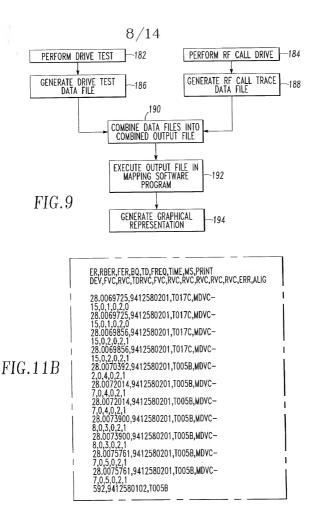


FIG.5

>pg pp9912	.txt				
Date Time	e(2) Site_ID	MIN(1)	Dialed_Digits	Tear-Down_Reason	
12/25/99	19:26:09	20	2012075854	12014981322	MFG
12/23/99	14:56:20	219	2012075854	5617767114 19547814445	MFG
12/26/99	21:40:32 19:06:49	167 82	2012130072 2012134416	9544289147	MFG MFG
12/23/99 12/23/99	19:06:49	82	2012134416	9544289147	MFG
12/25/99	17:23:55	82	2012134416	9544285083	MFG
12/25/99	15:06:20	82	2012134416	2015680907	MFG
12/25/99	13:04:16	82	2012134416	2015680907	MFG
12/25/99	13:04:05	82	2012134416	2015680907	MFG
12/25/99	13:03:53	82	2012134416	2015680907 2015680907	MFG MFG
12/25/99 12/25/99	13:03:31 13:01:49	82 82	2012134416 2012134416	2015680907	MFG
12/25/99	12:53:38	82	2012134416	2015680907	MFG
12/25/99	12:52:32	82	2012134416	2015680907	MFG
12/25/99	12:52:03	82	2012134416	2015680907	MFG
12/25/99	12:50:48	82	2012134416	2015680907	MFG
12/25/99	12:48:15	82	2012134416 2012134416	2015680907 5680907 MFG	MFG
12/25/99	12:47:16 11:58:50	82 82	2012134416	8003328463	MFG
12/24/99 12/24/99	11:58:08	82	2012134416	8003328463	MFG
12/24/99	10:03:16	82	2012134416	9544289147	MFG
12/22/99	14:58:09	80	2012300764	19546467166	MFG
12/29/99	10:54:28	177	2012499657	19086881800	MFG
12/29/99	10:51:49	177	2012499657 2012499657	9412503698 12012400657	MFG MFG
12/29/99	10:25:04 10:24:42	145 145	2012499657	12012400657	MFG
12/29/99 12/27/99	21:26:01	49	2012476225	15616551115	MFG
12/24/99	19:22:48	219	2012476225	15615551212	MFG
12/24/99	19:22:26	219	2012476225	15615551212	MFG
12/24/99	19:22:06	219	2012476225	15615551212	MFG
12/24/99	19:13:38	219	2012476225	5617950022 15614996976	MFG MFG
12/27/99	12:01:06 16:23:47	20 12	2012476225 2012640686	3105152822	MFG
12/23/99 12/23/99	16:23:47	12	2012640686	3105152822	MFG
12/23/99	16:17:03	12	2012640686	3105152822	MFG
. 2, 20, 00					

>pg map1299 ECP, CellNo, Longitude, Latitude, Count 4.1.-80.1675,26.155278.148 3,5,-80.361111,25.699444,209 1,6,-80.171667,26.36,675 1,7,-80.144167,26.562778,173 1,8,-80.109722,26.760556,76 3,9,-80.317222,25.679444,311 3,10,-80,266667,25,747222,115 4,15,-80.123056,25.854167,510 4,16,-80,198611,26,248889,401 1,18,-80,088889,26.45,380 1,20,-80.058611,26.651944,216 4,22,-80.210833,25.848611,138 4,23,-80.128889,26.085833,844 4,25,-80.288889,25.845556,55 1,26,-80.201111,26.630833,251 4.27.-80.204722,25.93,590 3,38,-80.360833,25.596667,255 3,39,-80.333889,25.649444,584 4.30.-80.415.26.086389,207 4,31,-80.175833,26.121944.128 1,37,-80.681389,26.686667,213 4,40,-80.364444,25.828333.156 4,42,-80.286944,25.920556,147 4,43,-80.168056,26.024722,333 3.46.-80.129167.25.793611,2694 3,47,-80.238611,25.811389.121 1,49,-80,051667,26,711944,381 4,50,-80,160556,25,908611,187 4,52,-80.26,26.121667,456 4.53, -80, 105556, 26, 136389, 501 3,54,-80.383333,25.653056,81 4,55,-80.249444,26.268333,314 3,56,-80.294722,25.703889,184 3,57,-80,315,25,808333,21 3,58,-80.265278,25.788333,267 4,60,-80,25,25,891667,205 4,61,-80.090833,26.230278,147 4.64, -80.211667, 26.0175, 595





MOBILE TELEPHONE CELL TRAFFIC RECORDING DIGITAL SIGNAL STRENGTH MEASURMENTS								
MSNB 9412580201	CELL TO17C	DEV MDVC-1060	SSFVC 23	SSRVC 20	1			
SSSTDRVC 6	BERFVC 3	BERRVC 2	RBERRVC 2	FERRVC 0				
BQRVC 6	TDRVC 3	FREQERR 1	TIMEALIGN 0	MSPOW 2				
NCELL T017A T017B T006B T016B T004A T005B T005A T018A T154B	NSSFFMC 5 23 17 13 29 33 23 21 21	MEASCHAN 1260 1272 1300 1305 1251 1302 1290 1294 1303	VIND Y Y Y Y Y Y Y Y Y					
TIMW 11:08:27 FND	PRINTIN 0	D	FC0DE					
MOBILE TELEPHONE CELL TRAFFIC RECORDING CANDIDATE LIST FOR HANDOFF								
MSNB 941258020	CELL 1 TO17C	TIME 11:08:28	FCODE	URGENCY 0				
CANDCELL T005B	CELL ³	TYPE	NTYPE STD	RATING 0				
END								

FIG.10

XTEL LOG FILE

DATE,TIME,LONGITUDE,LATITUDE,ALT,SPEED,HEADING,DPS_MODE,PHONE_TASK,TASK DESC.CHAN,RSSI,MODTYPE,SLOT,CHANTYPE,SAT,DVCC,POWER,BER,BER_CODE,SBI,T A.CELLÍ.DISTANCEÍ.CELL2.DISTANCE2.CELL3.DISTANCE3.LOWER CTOA.UPPER CTOA , COCHA_RSSI, MARKÉR, CHÁN_GRP, EVÉNT, EVINFO, BAND, LÍSTTYPE, LISTCÍ, CHANT, RSS 11, CHANZ, RSSIZ, CHANZ, RSSIZ, CHÁNZ, RSSIZ, CHANZ, RSSIZ, CHANG, RSSIG, CHANZ, RS SI7.CHAN8.RSSI8.CHAN9.RSSI9.CHAN10.RSSI10.CHAN11.RSSI11.CHAN12.RSSI12.C HAN13.RSS113.CHAN14.RSS114.CHAN15.RSS115.CHAN16.RSS116.CHAN17.RSS117.CH AN 18, RSS118, CHAN 19, RSS119, CHAN 20, RSS120, CHAN 21, RSS121, CHAN 22, RSS122, CHAN 23, RSS123, CHAN 24, RSS124, CHAN 25, RSS125, REVISION 7/30/99,11:08:27,-82.3321883,27.9813839,9,40.3,86.9,G8,5,Conversation,1218,-33,03,V,3,5,2,0.87,3,0,0,,,,,,14,15,-100,0,8,,1,Neig,9,1284,-89,1302,-93,1300,-103,1255,-107,1317,-109,1303,-109,1314,-111,1305,-111,1315,-7/30/99,10:52:47, 82.3321883,27.9813839,9,40.3,86.9,G8,5,Conversation,1218,-93, D. 3, V. 3, 5, 2, 0.84, 3, 0, 0, ., ., 14, 15, -100, 0, 8, ., 1, Neig, 9, 1284 - 89, 1302, -93, 1300, -103, 1303, -107, 1255, -109, 1314, -111, 1317, -111, 1305, -111,1315 7/30/99,10:52:48,-82.33219553,27.9813947,10,43.1,,87.0,G8,5,Conversation,1218,-93,0,3,V,3,5,2,0,84,3,0,0,,,,,,,-10,38,-137,0,8,,,1,Neig,9,1284-89,1302,-93,1300,-103,1303,-107,1255,-109,1314,-111,1317,-111,1305,-111,1315,-7/30/99.10:52:48.-82.3319553,27.9813947,10,43.1,87.0,G8,5,Conversation,1218,-95,D,3,V,3,5,2,0.84,3,0,0,,,,,=10,38,=137,0,8,,,1,Neig,9,1284-83,1302,=93,1300,=101,1303,=105,1255,=109,1305,=111,1314,=113,1315,= 113.1317 7/30/99.10:52:49.-82.3317164,27.9814044,10,44.7,87.2,G8,5,Conversation,1218,-5,0,3,7,3,5,20,99,3,00,,,,,,,-10,3,8,-137,0,8,,,1,Neig,9,1284-83,1302,-93,1300,-101,1303,-105,1255,-109,1305,-111,1314,-113,1315,-111,1317,-1318

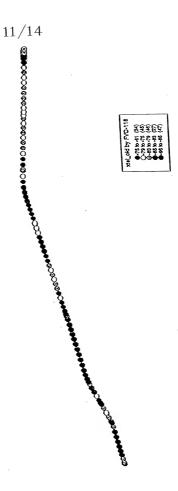


FIG.12

COMARCO FILE

13:20:00.8,26.677,-81.567 12:20:01.2,25.230,-81.456

13.21.00.3,28.655,-81.2128

FIG. 13A

Time,Long,Lat,CellNo,SS, 12:41:29.28.6559300.-18.205792000.1353.-124 12:41:29.28.6559300.-18.205792000.201.-106 12:41:29,28,6559300,-18.205792000,32,-106 12:41:29,28,6559300,-18.205792000,321,-76 12:41:29,28,6559300,-18.205792000,323,-66 12:41:29,28,6559300,-18.205792000,831,-100 12:41:30,28,6559260,-18.205580000,323,-66 12:41:31,28,6559170,-18.205380000,321,-75 12:41:31,28,6559170,-18.205380000,321,-75 12:41:31.28.6559170.-18.205380000.323.-64 12:41:32.28.6559080.-18.205198000.323.-63 12:41:33,28,6558950,-18.204922000,321,-73 12:41:33,28,6558950,-18.204922000,323,-62 12:41:34,28,6558900,-18.204769000,321 12:41:34,28,6558900,-18.204769000,321.-73 12:41:34,28,6558900,-18.204769000,322,-98 12:41:34,28,6558900,-18.204769000,323,-61 12:41:35,28,6558900,-18.204577000,1353,-124 12:41:35,28,6558900,-18.204577000,201,-105 12:41:35,28,6558900,-18.204577000,202,-106 12:41:35.28.6558900.-18.204577000.32.-105 12:41:35.28.6558900.-18.204577000.323.-63 12:41:35,28,6558900,-18.204577000,831,-99 12:41:37,28,6558970,-18.204219000,321,-73 12:41:37,28,6558970,-18.204219000,323,-67 12:41:38.28.6559000.-18.204044000.321.-74 12:41:38,28,6559000,-18.204044000,323,-67 12:41:38,28,6559000,-18.204044000,321,-74 12:41:38.28.6559000.-18.204044000.323.-67 12:41:40,28,6559020,-18.203683000,1353,-122 12:41:40,28,6559020,-18.203683000,202,-104 12:41:40,28,6559020,-18.203683000,32,-105 12:41:40,28,6559020,-18.203683000,321,-73 12:41:40,28,6559020,-18.203683000,322,-96 12:41:40,28,6559020,-18,203683000,323,-67 12:41:41.28,6559070,-18.203457000,321,-72 12:41:41,28,6559070,-18.203457000,323,-66 12:41:42,28,6559100,-18.203125000,321,-71 12:41:42,28,6559100,-18.203125000,323,-66

13/14

05/10/99 1 v- 05/10/99 1			— Reco	rd#	1.					 — v
05/10/99 1	3.22.05 ALM	INF /10	3 7	32		G	TC	457	,	•
03/10/33 1	Call Ma	nitor Cal	I Recoi	rd ha	e haan '	Writta	n in PAM	diek		
	DL (A	07) 02270	00 0-1	u nu	- L., MC			uisk		
	Pn#:(4	07792230	uz calı	ciea	L DA W2	- 1	nobile cle	ar		
V			— Kecc	rd#	2:					 v
05/10/99 1	3:22:04 ALM	INF 411	3 7 3	32		G	TC	457	1	
, ,	Call Ma	onitor: Cal	I RSSI	value						
	(407) 92	23002 ce	11 323	rrssi	-77 att	n 4	snr 40			
v	(407732		- Pacc	rd #	7, 31,		JIII 10			 _ v
v05/10/99 1 v05/10/99 1	3.22.04 ALM	INE 411	7 7	11 U #	J,	ς	CDC			 v
03/10/33 1	0.22.04 ALM	nitari Adi	أالمما	DCCI.	calusas fi		Sanning Sanning	Dave		
	(407) O	oniior: Auj	. cen	1221	rulues II	77	Scanning	KCVI.		
	(40/)92	223002 Ce	sii"ia k	:221:\	525 / -	15				
V			— Kecc	rd#	264:					 — v
05/10/99 1	3:21:00 ALM	INF 411	7 7 :	20		Α	SRC			
	Call Mo	onitor: Ad	. cell	RSS۱۱	values fi	rom	Scanning	Rcvr.		
	(407)92	23002 C	ell id R	SSI:/:	201 / -	-98	•			
V			Reco	rd#	265.					 V
n5/1n/00 1	3-21-00 ALM	INT A11	7 7	710 II	200.	D	SDC			•
03/10/33 1	Call M	nitori Adi	, adi	DCCI.	raturas fi	D	JIIC Canning	Dave		
	(407) O	007000 AU	i cen	17331	700 /	107	Sculling	MCVI.		
	(407)92	223002 C	sıı"ia 4	(221:\	3ZZ / -	-103				
V———— 05/10/99 1			— Kecc	ord #	266:	_				 V
05/10/99 1	3:21:00 ALM	INF 411	7 7 1	83		A	SRC	_		
	Call M	onitor: Ad	. cell	rssi '	values f	rom	Scanning	Rcvr.		
	(407)92	223002 C	ell id F	RSSI:/	861 / -	-96	•			
V05/10/99 1 V-05/10/99 1 V05/10/99 1 V05/10/99 1			— Reco	ord#	267:					 v
05/10/00 1	3-21-00 ALM	INF /11	7 7	32	207.	٨	SPC			•
00/10/00	Call M	onitor: Ad	الم '	P221	values f	rom	Scanning	Povr		
	(407)0	227002 6	J. CON	1001./	701063 I	70	Jeanning	MCVI.		
	(40//9/	223002 C	all_la t	(221:\	3/1 / -	-/0				
V	7.04.00		- Keco	ord#	Z68:					 V
05/10/99 1	3:21:00 ALM	INF 411	/ /	135		G	SRC	;_		
	Call M	onitor: Ad	j. cell	RSSI	values t	rom	Scanning	Revr.		
	(407)9	223002 Ci	ell_id F	?:I22 <i>\$</i>	1353 /	-11.	3			
v			— Reco	ord#	269:					 V
05/10/99 1	3-21-00 ALM	INF 411	7 7	20		R	SRC	`		
00/10/00	Call M	onitor, Ad	cell	P\$\$1	values f	rnm	Scanning	Rovr		
	(407)0	227002 C). CON	0001./	701003 1	100	Jedining	11011.		
	(40773	223002 0	en_lu r	(331./	JUZ / -	-100				
V	(407) 9: 		— Kec	ora #	270					 γ
05/10/99 1	13:21:00 ALM	IN: 411	3 /	<i>3</i> 2 .		G	10	45	ſ	
	Call M	onitor: Ca	II KSSI	value	;					
	(407) 9	223002 ce	ell 323	rrssi	-72 at	tn 4	snr 40			
v	(407) 9: 		- Reco	ord#	271:	_				 V
05/10/99 1	3-21-00 ALM	INF 411	17 7	32		G	SRO			
00, 10,00	Call M	onitor: Ad	cell	1223	t saulny	rom	Scanning	Revr		
	(407)0	222002 P	J. 0011	0001./	777 /	-71	Journing	MOTI.		
	(40//9	22JUUZ U	u_lu l	1331:/	JZJ / "	-/1				
V	(407)9 		— кес	ord #	212	_				 γ
05/10/99	13:21:00 ALM	IN: 41	!/ !	5		R	SRO	;_		
	Call M	onitor: Ad	j. cell	KZZI	values f	rom	Scanning	Rcvr.		
	(407) 9	223002 C	ell_id l	rssi:/	32 / -	115				
			_		1.4					



tce0528_out by SS
O =556: =65 (930)
• =226: =65 (534)
• =456: =42 (465)
• =405: =46 (540)
• =166: =105 (462)
• =127 to =116 (565)

FIG.15